

PATENT COOPERATION TREATY

REC'D 13 SEP 2005

WIPO


PCT

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 3756PTWO/AG/a	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2004/052235	International filing date (day/month/year) 17.09.2004	Priority date (day/month/year) 17.09.2003
International Patent Classification (IPC) or national classification and IPC B29C49/48		
Applicant S.I.P.A. SOCIETA INDUSTRIALIZZAZIONE ...et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 12.07.2005	Date of completion of this report 12.09.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Ingelgard, T. Telephone No. +49 89 2399-7249	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/052235

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-5 as originally filed

Claims, Numbers

1-5 received on 15.07.2005 with letter of 13.07.2005

Drawings, Sheets

1/3-3/3 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/052235

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-5
	No: Claims	
Inventive step (IS)	Yes: Claims	1-5
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/EP2004/052235

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following document:

D1: PATENT ABSTRACTS OF JAPAN vol. 1996, no. 11, 29 November 1996 (1996-11-29) -& JP 08 174552 A (HAKKO DENKI SEISAKUSHO:KK), 9 July 1996 (1996-07-09)

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows:

A heated blow mould for making thermoplastic containers using the thermostabilizing treatment or heat-set process wherein a mould holder with a wall of a desired thickness is divided into two mirror shell halves each housing half a mould with a specific shape or making the container to be made comprising a heating system with a set of first electric heating elements placed parallel to the generator of the container to be made.

The subject-matter of claim 1 differs from this known blow mould in that it comprises second electric heating elements, which are substantially transversal to said first elements and placed in areas where more heat must be supplied, wherein said first and said additional electric heating elements are electrically connected to each other and wherein the first and second electric heating elements are placed between said mould holder and said mould.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as that the moulds get more expensive when the moulds themselves are equipped with heating elements and that separate heating elements applied outside the moulds normally results in a too low heat transfer.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/EP2004/052235

The proposed solution is not described in any single prior art document or combination of prior art documents.

Claims 2-5 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

Note: The newly filed claims are considered to be allowable, but the description is not in conformity with these claims.

NEW CLAIMS

1. A heated blow mould (2) for making thermoplastic containers using the
 5 thermostabilizing treatment or heat-set process wherein a mould holder
 with a wall of a desired thickness is divided into two mirror shell halves
 each housing half a mould with a specific shape for making the container
 to be made comprising a heating system with a set of first electric heating
 elements (3, 4, 5, 6) placed parallel to the generator of the container to be
 10 made,
 characterised in that it comprises second electric heating elements (7, 8,
 9, 10), which are substantially transversal to said first elements and placed
 in areas where more heat must be supplied, wherein said first (3, 4, 5, 6)
 and said additional electric heating elements (7, 8, 9, 10) are electrically
 15 connected to each other and wherein the first and second electric heating
 elements (7, 8, 9, 10) are placed between said mould holder and said
 mould.
2. A heated mould as claimed in claim 1 wherein said first electric heating
 elements are tubular electric resistors and are arranged parallel to each
 20 other.
3. A heated mould as claimed in claim 1 wherein said additional heating
 elements are placed at the top and bottom ends of the container to be
 made.
4. A mould as claimed in claim 1 wherein at least one of said heating
 25 systems is placed near the inside surface of the mould holder, while at
 least another of said heating systems is placed nearer the outside face of
 the mould.
5. A mould as claimed in claim 1 wherein a layer of thermally insulating
 material is placed at the outside surface of the mould holder.

30